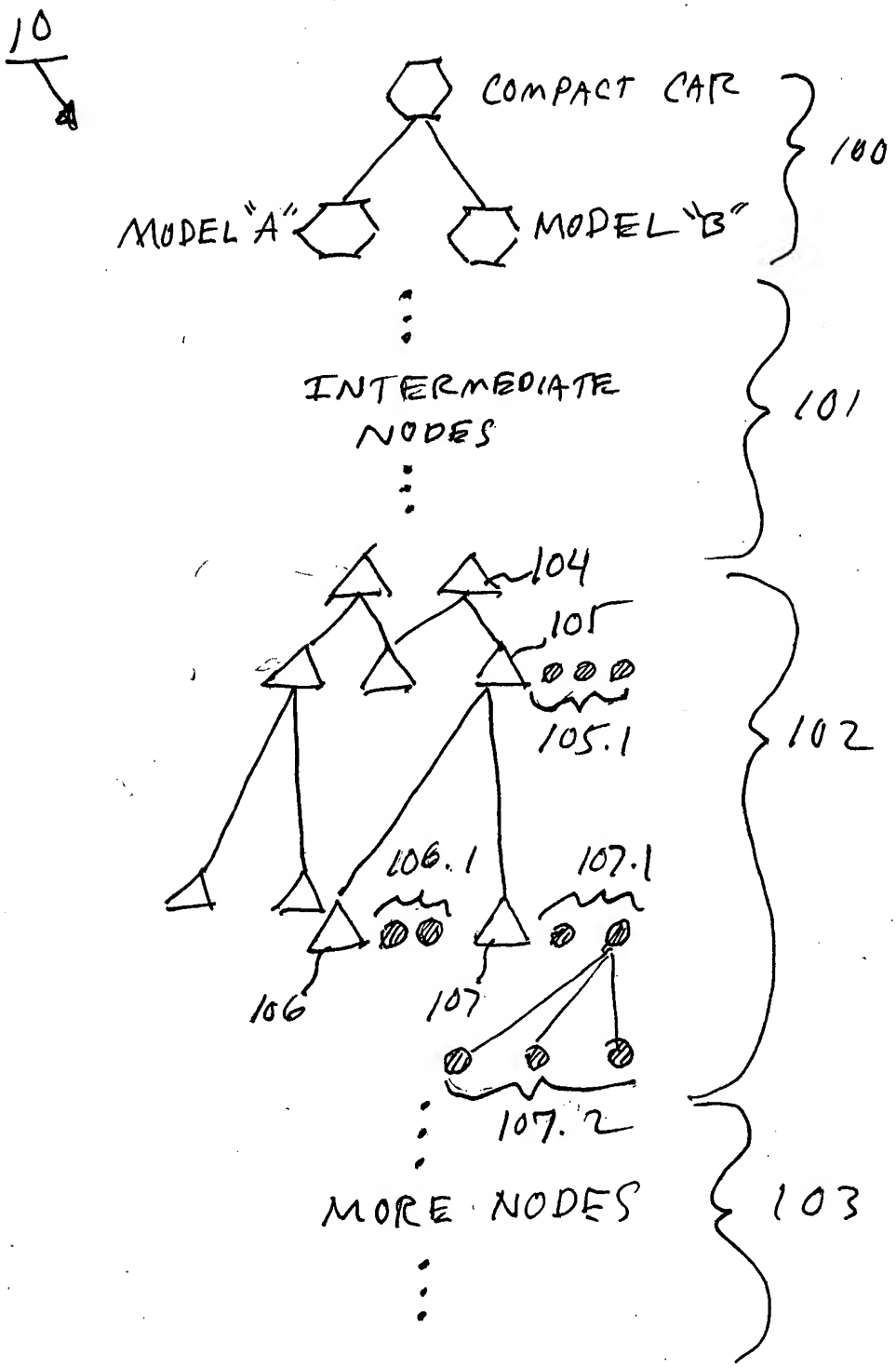
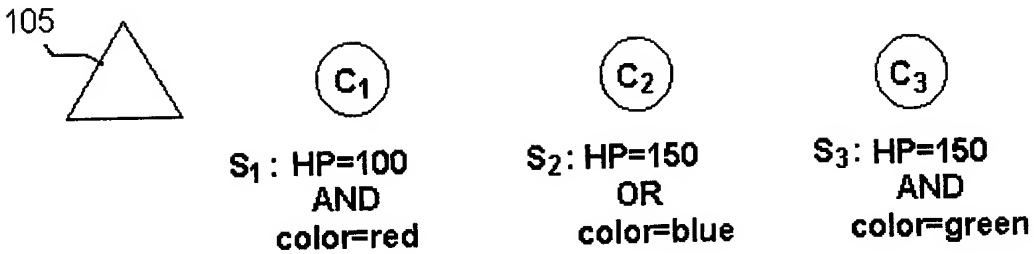

10
COMPACT CAR
MODEL "A"
MODEL "B"
100
INTERMEDIATE NODES
101
104
105
105.1
102
106.1
107.1
106
107
107.2
MORE NODES
103

FIG. 1



Restriction R_1 : IF HP = 100 THEN color ≠ blue
Restriction R_2: IF HP = 150 THEN color ≠ red

FIG. 2

300

301

302

Char	Value	100 red	150 red	100 blu	150 blu	100 gre	150 gre
HP	100	1	0	1	0	1	0
HP	150	0	1	0	1	0	1
Color	red	1	1	0	0	0	0
Color	blue	0	0	1	1	0	0
Color	green	0	0	0	0	1	1

FIG. 3

301 302

Char/ cond	value	100 red	150 red	100 blu	150 blu	100 gre	150 gre
HP	100	1	0	1	0	1	0
Color	red	1	1	0	0	0	0
s_1		1	0	0	0	0	0

400

FIG. 4

500

Cond	100 red	150 red	100 blu	150 blu	100 gre	150 gre
s_1	1	0	0	0	0	0
s_2	0	1	1	1	0	1
s_3	0	0	0	0	0	1
r_1	0	0	1	0	0	0
r_2	0	1	0	0	0	0
f	0	1	1	0	0	0
n	0	0	0	0	1	0
i_{23}	0	0	0	0	0	1

FIG. 5

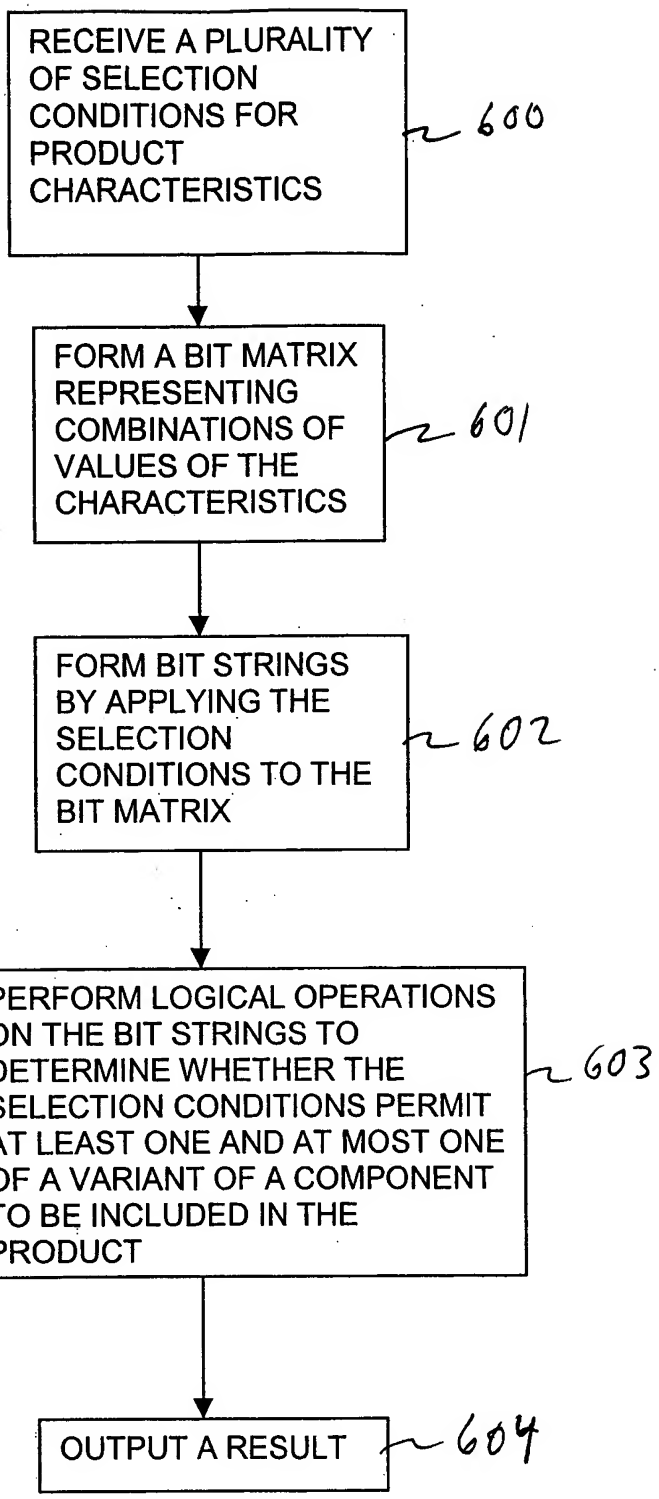

RECEIVE A PLURALITY OF SELECTION CONDITIONS FOR PRODUCT CHARACTERISTICS
600
FORM A BIT MATRIX REPRESENTING COMBINATIONS OF VALUES OF THE CHARACTERISTICS
601
FORM BIT STRINGS BY APPLYING THE SELECTION CONDITIONS TO THE BIT MATRIX
602
PERFORM LOGICAL OPERATIONS ON THE BIT STRINGS TO DETERMINE WHETHER THE SELECTION CONDITIONS PERMIT AT LEAST ONE AND AT MOST ONE OF A VARIANT OF A COMPONENT TO BE INCLUDED IN THE PRODUCT
603
OUTPUT A RESULT
604

FIG. 6

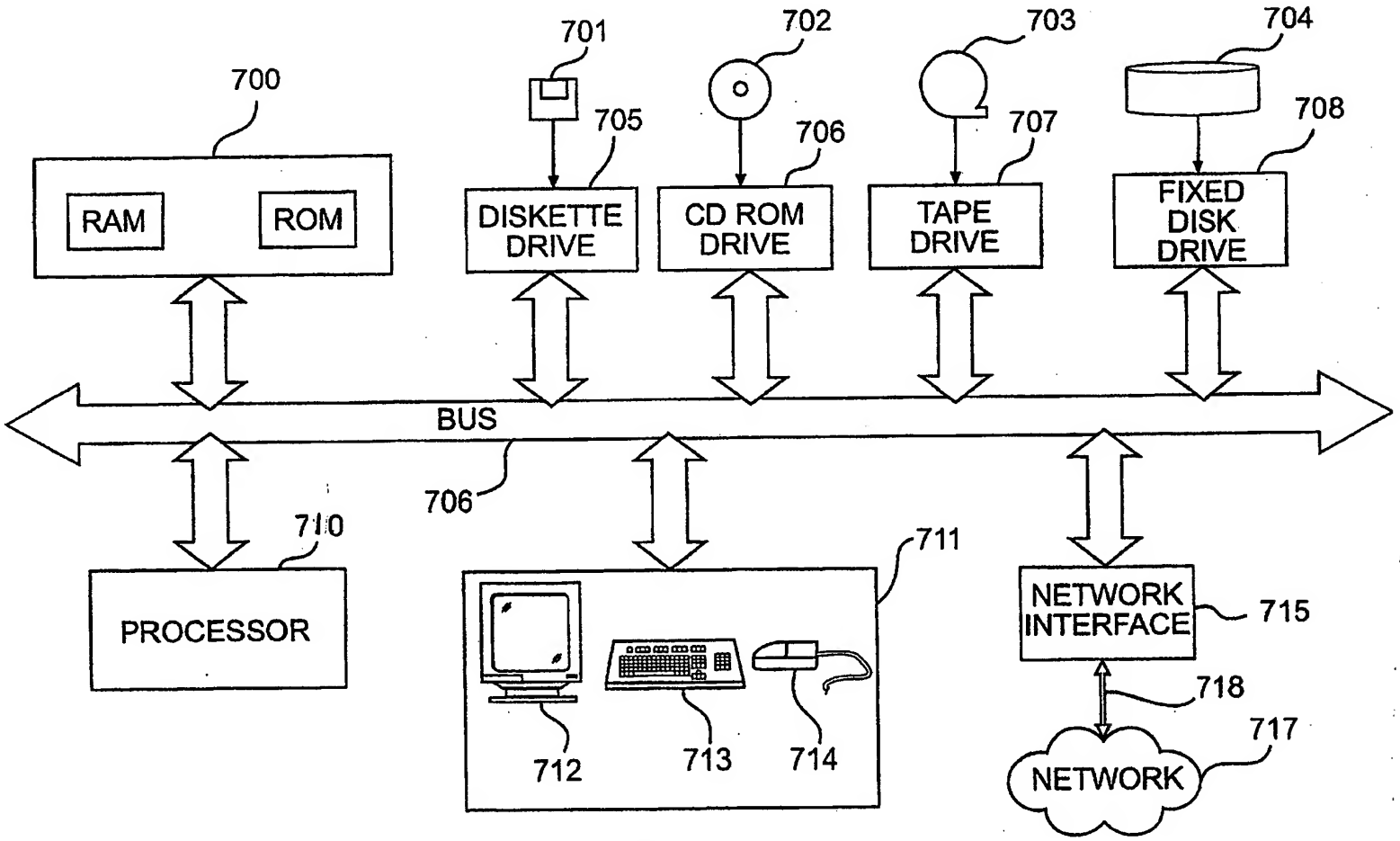

700
RAM
ROM
701
705
DISKETTE DRIVE
702
706
CD ROM DRIVE
703
707
TAPE DRIVE
704
708
FIXED DISK DRIVE
BUS
706
710
PROCESSOR
711
712
713
714
NETWORK INTERFACE
715
718
717
NETWORK

FIG. 7